MEMORANDUM



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To: Project Team Members **Date:** 09/09/02

From: Montgomery Watson Harza Reference: 08/23/02 Bosque and Leon

Rivers Watershed Study Team

Meeting Notes

Subject: Team Meeting Notes

The following is the "final" copy of the meeting notes from the events and issues discussed during the team meeting held at the USACE office in Fort-Worth, Texas on August 23, 2002. The topics are organized in the same order as the meeting agenda.

Attendees:

United States Army Corps of Engineers, Fort Worth District (USACE) – Brian Condike, Wayne Elliott

Brazos River Authority (BRA) – Gayle Haecker

Montgomery Watson Harza (MWH) – Ronald Hartline, Kartik Gandhi

The Institute of Environmental and Human Health at Texas Tech University (TIEHH) – Dr. Todd Anderson

Environmental Protection Agency (EPA Region 6) – Bob Sturdivant, Cheryl Overstreet

Welcome and Housekeeping

Welcome and introduction of meeting attendees.

USACE

- Mr. Condike reported that the USACE laboratory in Omaha had been validated for analysis
 of water samples, and the TIEHH laboratory had been validated for analysis of both water
 and tissue samples.
- Mr. Condike informed the team that Right of Entries (ROEs) had been obtained for 13 sites, and handed out copies of ROEs for stations 1, 2, 9, 6, 11 and 13. Mr. Hartline reported that certain problems were encountered while installing equipment for stations 8, 14 and 15 as detailed below. MWH provided aerial maps and photographs to aid in the discussion.
 - Station No. 8 (Station Creek at Jefferson): The site where the station is to be installed is owned by a different party. The field team had to remove the equipment after physically setting it up at the site. MWH, along with BRA, identified alternate locations for the station, the best being at Harris Creek at Middle Windsor.
 - Station No. 14 (Downstream of the intersection of Middle Bosque and South Bosque streams): The property where USACE had obtained access was not located in the correct

- area. Therefore, the field teams could not install the sampling equipment for this station. MWH, along with BRA, conducted a reconnaissance survey to identify an exact location for this station. This survey showed that the best location for this station is 107 Windsor road.
- Station No. 15 (Mr. James Burwell's property at South Bosque River): Mr. Hartline pointed out that BRA was reluctant in adding this site for sampling as it was difficult to get to when it rains. Mr. Gandhi said that he had visited this site along with Mr. Kyle Headley (BRA) and displayed photographs to depict the conditions to the team. He pointed out that this was the site where we did not have permission to install monitoring wells. Mr. Condike asked the team to continue to use this site as it was critical and indicated that some samples may have to be collected during rain events by walking to this site. Mr. Condike said that there might be certain occasions when this site was impossible to get to and hence we would not be able to collect samples during that round of sampling.
- Mr. Condike suggested taking blank ROE forms to the new property locations to expedite the
 process of obtaining ROEs. Mr. Condike indicated that USACE would obtain the ROE for
 Station 8 from McLennan County. Ms. Haecker suggested that Mr. Kyle Headley (BRA)
 would follow up with the ROEs. In the event that he was occupied, she would follow up with
 the ROEs herself.
- Mr. Condike asked Mr. Gandhi to provide both USACE and BRA with map locations for these stations and anticipated property owner information gathered in the field, if available, for conducting the ROE process.
- Mr. Hartline stressed the importance of obtaining the ROEs as soon as possible to install the stations along with the others to prevent delay in starting the field sampling programs.

TIEHH

- Dr. Anderson reported that TIEHH had conducted testing on birds and small mammals at tributary intersection on Oglesby road and found that perchlorate was high in the kidneys and livers. He reported that this was one of the sites where perchlorate was consistently present in surface water. Dr. Anderson saw a need to perform follow-up testing and also proposed testing larger mammals in this area.
- Mr. Condike said that algae samples would be analyzed for perchlorate at the TIEHH laboratory and not at the USACE laboratory in Omaha.
- Mr. Hartline said that MWH had obtained better lake boundaries from USACE and would provide the map to TIEHH for their use.

MWH

- Mr. Hartline reported that team comments were being incorporated into the Draft Sampling and Analysis Plan (SAP), Draft Quality Assurance Project Plan (QAPP), Draft Longitudinal Stream Sampling Study Field Sampling Plan (FSP) and the Draft Health and Safety Plan (HSP) and final copies of these reports would be sent to the team members next week. The Draft Lake Belton and Lake Waco Delta Areas Field Sampling Plan, which includes the delta areas field sampling, surface water sampling at the golf course intakes and any additional manual sediment, sediment pore water and surface water sampling, would also be sent to the team members next week. Mr. Hartline stated that the remaining FSPs to be completed are for the Lake Belton anoxic study and fate and transport study.
- Mr. Hartline informed the team that the ISCO sample bottles would be sent directly to the USACE laboratory from the field, instead of the BRA laboratory transferring the samples from ISCO bottles to other sampling jars. This procedure, he felt, would prove very efficient for the transmittal of the samples from the field to the USACE laboratory. Ms. Haecker said that the samples would have to go through the BRA laboratory because their field team does not ship samples direct. Their laboratory does all the shipping for BRA. She also mentioned

that the BRA laboratory maintains records of all the samples collected and hence the BRA laboratory manager would need to serve as a point of contact between the field team, USACE and the MWH team members. Mr. Condike agreed to this sample flow process. The team also agreed that three additional ISCO sampling sets would be purchased for the project so that the field team would not run out of sampling bottles. The USACE laboratory, he continued, would decontaminate the bottles and return to the BRA laboratory for reuse in the field.

- Mr. Hartline updated the team on the field equipment installation activities that took place the week before. The following is a brief summary of the activities that took place.
 - Station No. 3 (Texas A&M Property 1): The equipment was set in place and installed. This station tributary was also surveyed.
 - Station No. 4 (Texas A&M Property 2): The equipment was set in place and installed.
 - Station No. 6 (Mother Neff State Park): The equipment was set in place and installed. The surveying for this station was not conducted as the river was deep and BRA did not have the necessary equipment to survey the river at that time. Mr. Condike suggested using a boat to conduct the survey. Ms. Haecker said that BRA would possibly rent the necessary equipment to survey this station cross-section.
 - Station No. 7 (South Bosque River at Indian Trail): The equipment was set in place and installed. This tributary cross-section was also surveyed.
- Mr. Hartline stated that MWH had submitted the scope of work for the Project Chemist and had the budget ready for submission as well. A decision on this scope was needed as soon as possible as the team was moving forward with the field sampling. Mr. Condike said that he would try to expedite this process next week.
- Mr. Gandhi gave a demonstration of the GIS developed for the project. He said that all the data collected had been incorporated into the GIS excluding the data collected by TIEHH and the City of Waco.
- Mr. Gandhi brought out the critical issues that were delaying the development of the GIS
 - GIS data requested by MWH from USACE on 6/19/2002.
 - Expected delivery date of software (ArcIMS) from USACE formally requested on 6/20/2002
 - The server, which was sent to be configured by Mwired (MWH's support division), had encountered serious problems not typical of a new server and had to be returned to Dell, who will expedite the delivery of a replacement to prevent future delay.
- Mr. Gandhi presented the future applications that would be developed by MWH for the storage, maintenance and analysis of the data collected throughout the project listed below.
 - Document Selector
 - Data Form Manager
 - Theme Manager
 - Sampling Data Importer (Shell)
 - Sampling Data Importer (ISCO Flow Data)
 - Sampling Data Importer (ISCO Rain Data)
 - Sampling Data Importer (Lab Sample Results)
 - Sampling Data Importer (Dye Results)
 - Sampling Data Importer (Other Parameters)
 - Sampling Data Importer (Algae)
 - Sampling Data Importer (Texas Tech data)
 - Data Clean Up
 - Graph Manager
 - Plume Maps
 - Create Plots
 - ArcIMS Tools/Development

- Mr. Condike suggested adding a tool, which would incorporate groundwater levels into the GIS. Mr. Condike also asked MWH to only develop data import tools for the sample parameters where significant amounts of data will be collected. Manual input of other sample sets will be more efficient. The team formally approved the proposed application tools to be developed in the meeting.
- Mr. Gandhi said that the following information was required from various members in the team to configure the applications. He also stressed the importance of using the same data formats every time the data was submitted to assure ease in uploading the data into the GIS.
 - Sample raw and processed ISCO flow data and regular updates required from BRA.
 - Sample raw and processed ISCO rain data and regular updates required from BRA.
 - Sample Data Output and regular updates from USACE Lab needed to configure importer.
 - All sampling data (including data type, location, result etc) and regular updates required from TIEHH in table format.
- Mr. Hartline requested modifications for Task 5 (Data Model Integration) of the GIS contract (Modification 1 of contract no DACW57-97-D-0004) for MWH. Since the team is no longer going to develop a model, he recommended using GIS applications to further analyze the data gathered. Mr. Hartline suggested a change in scope to use the funds associated with GIS tools development purposes. Mr. Condike agreed that changing the scope would be the best way to move the funds without further delay, but stated that he would have to look into the exact wording to discuss this further.

BRA

- Ms. Haecker said that all of the field sampling issues had already been discussed earlier in the meeting. One issue that she wanted to discuss was conducting a trial run of the stations already installed to check out the whole process of collecting the samples, shipping them, having the laboratory analyze them, send the results to the project chemist and uploading data into the GIS database. Mr. Condike felt that it would be a good idea to test the whole cycle of field sampling so that everybody involved gets an idea of all the steps in the process. The team decided that they would try to conduct this in the next couple of weeks.
- Ms. Haecker also inquired as to whether the samples needed to be collected within a period of 12 hours as many sample events would occur on a Friday and it may not possible to collect the samples until the next Monday. The team discussed the topic and decided that they need to retrieve the samples within 12 hours decided except for the sampling events that occur during weekends which would be collected on the following Monday.

Budget and Schedule.

- The team discussed the funding for the next year and decided that they had sufficient funds for the project for next year and would not request additional funding for the current year. The primary reasons for not requiring the funding was not pursuing the modeling effort and efficient teamwork between the various team members.
- MWH provided the team with a copy of a draft team schedule for the project and asked the team members to respond with comments. Mr. Hartline pointed out that it is unlikely that the project can be completed by September 2003. The team agreed on this issue. Mr. Condike indicated that he expected that the team would be submitting final reports by around December 2003. Mr. Hartline said that according to the draft project schedule, the final completion date may extend to February 2004. Mr. Hartline said that MWH would provide a final project schedule after receiving comments from all the team members on the draft schedule.

Next Meeting.

Mr. Condike said that the next team meeting would be scheduled in October and he will send out his scheduling spreadsheet to help select the date. The meeting will be held in USACE's office in FortWorth.

Adjourn